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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,890	11/21/2003	Sergei Podshivalov	GLBL/040	1437

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EXAMINER

MANCHO, RONNIE M

ART UNIT	PAPER NUMBER
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3663

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/719,890

Applicant(s)

PODSHIVALOV ET AL.

Examiner

Ronnie Mancho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-20 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 11/21/03.  
 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) ☐ Notice of Informal Patent Application (PTO-152)  
 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Diggelen et al (6813560)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior

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art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1-20, Diggelen et al anticipates the limitations in claims 1-20 as the specification contain the exact limitations disclosed in claims 1-20.

3. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Robbins (6799116).

Regarding claim 1, Robbins (abstract, figs. 1, 8-30) discloses a method of distributing satellite navigation data, comprising:

processing satellite signals at each of a plurality of reference stations to receive a respective plurality of satellite navigation data streams (col. 3, lines 48-67; col. 4, lines 48-67; col. 5, lines 1-67);

forming packets (fig.8) in response to said plurality of satellite navigation data streams to generate a plurality of packetized satellite navigation data streams; sending each of said plurality of packetized satellite navigation data streams to a processing system (col. 7, lines 59 to col. 8, lines 1-67);

removing (updating, col. 5, lines 36-45; throw out, col. 17, lines 51-54, lines 28-34; col. 18, lines 36-46), at said processing system, duplicate packets within said plurality of packetized satellite navigation data streams to generate a combined packet stream; and sending said combined packet stream into a communication network.

Regarding claim 2, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 1, further comprising: decoding satellite navigation data within said combined packet stream to generate satellite data.

Regarding claim 3, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 2, wherein said satellite data comprises at least one of ephemeris data, almanac data, ionosphere data, universal time offset data, satellite health data, and raw data bits.

Regarding claim 4, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 1, wherein said plurality of satellite navigation data streams comprises global positioning system (GPS) satellite navigation messages, and wherein each of said packets includes a sub-frame of said GPS satellite navigation messages.

Regarding claim 5, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 4, wherein each of said packets includes a header having a satellite identifier and a time-of-week (TOW) value.

Regarding claim 6, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 5, wherein each of said duplicate packets is removed in response to said satellite identifier and said TOW value associated therewith.

Regarding claim 7, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 1, wherein said processing system comprises a hub, and the method further comprises: receiving said combined packet stream from said communication network at a position location server.

Regarding claim 8, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 7, further comprising: decoding satellite navigation data within said combined packet stream to generate satellite data; and storing said satellite data in a cache disposed within said position location server.

Regarding claim 9, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 7, further comprising: receiving, at said position location server, at least one additional packetized satellite navigation data stream; removing duplicate packets within said combined packet stream and said at least

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one additional packetized satellite navigation data stream to generate another combined packet stream; decoding satellite navigation data within said other combined packet stream to generate satellite data; and storing said satellite data in a cache disposed within said position location server.

Regarding claim 10, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the method of claim 9, wherein said at least one additional packetized satellite navigation data stream is generated by at least one of an additional hub and a reference station disposed proximate to said position location server.

Regarding claim 11, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses a system for distributing satellite navigation data, comprising:

a plurality of reference stations (fig. 1) for processing satellite signals to receive a respective plurality of satellite navigation data streams and forming packets in response to said plurality of satellite navigation data streams to generate a plurality of packetized satellite navigation data streams (col. 4, 5, 7, 8); and

a processing system for receiving each of said plurality of packetized satellite navigation data streams, removing duplicate packets (updating, col. 5, lines 36-45; throw out, col. 17, lines 51-54, lines 28-34; col. 18, lines 36-46) within said plurality of packetized satellite navigation data streams to generate a

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combined packet stream, and sending (fig. 1) said combined packet stream into a communication network.

Regarding claim 12, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the system of claim 11, wherein said processing system includes a processor for decoding satellite navigation data within said combined packet stream to generate satellite data.

Regarding claim 13, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the system of claim 12, wherein said satellite data comprises at least one of ephemeris data, almanac data, ionosphere data, universal time offset data, satellite health data, and raw data bits.

Regarding claim 14, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the system of claim 11, wherein said plurality of satellite navigation data streams comprises global positioning system (GPS) satellite navigation messages, and wherein each of said packets includes a sub-frame of said GPS satellite navigation messages.

Regarding claim 15, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the system of claim 14, wherein each of said packets includes a header having a satellite identifier and a time-of-week (TOW) value.



Regarding claim 16, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the system of claim 15, wherein each of said duplicate packets is removed in response to said satellite identifier and said TOW value associated therewith.

Regarding claim 17, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the system of claim 11, wherein said processing system comprises a hub, and the system further comprises: a position location server for receiving said combined packet stream.

Regarding claim 18, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the system of claim 17, wherein said position location server comprises: a processor for decoding satellite navigation data within said combined packet stream to generate satellite data, and a memory for storing said satellite data.

Regarding claim 19, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses the system of claim 17, further comprising: an additional reference station disposed proximate to said position location server for providing at least one additional packetized satellite navigation data stream; wherein said position location server comprises: a processor for removing duplicate packets within said combined packet stream and said at least one additional packetized

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satellite navigation data stream to generate another combined packet stream and decoding satellite navigation data within said other combined packet stream to generate satellite data; and a memory for storing said satellite data.

Regarding claim 20, Robbins (abstract, figs. 1, 8-30; col. 4, 5, 7, 8, 15, 16, 17, 18) discloses an apparatus for distributing satellite navigation data, comprising:

means for processing satellite signals at each of a plurality of reference stations to receive a respective plurality of satellite navigation data streams (fig. 1);

means for forming packets in response to said plurality of satellite navigation data streams to generate a plurality of packetized satellite navigation data streams; means for sending each of said plurality of packetized satellite navigation data streams to a processing system (fig. 1);

means for removing (updating, col. 5, lines 36-45; throw out, col. 17, lines 51-54, lines 28-34; col. 18, lines 36-46), at said processing system, duplicate packets within said plurality of packetized satellite navigation data streams to generate a combined packet stream; and means for sending said combined packet stream into a communication network.

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***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following: US 20030223422A1, US 20020049536A1, US 20030212821A1, and US006725159B2 all disclose a satellite navigation system.

***Communication***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronnie Mancho  
Examiner  
Art Unit 3663

6/24/05

  
JACK KEITH  
PRIMARY EXAMINER  
SPE 3663